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APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/733,802	12/12/2003		Russell Smith	006242.00046	8820	
22907	7590	06/16/2005	•	EXAMINER		
BANNER &		FF .	RUDDOCK, ULA CORINNA			
1001 G STRI SUITE 1100			ART UNIT	PAPER NUMBER		
WASHINGT		20001	1771			
•				DATE MAILED: 06/16/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

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· ·		Applicat	ion No.	Applicant(s)					
			302	SMITH, RUSSELL					
	Office Action Summary	Examine	r	Art Unit					
		Ula C. Ri		1771	•				
Period fo	The MAILING DATE of this commu or Reply	nication appears on th	e cover sheet with the c	orrespondence addr	ress				
THE   - External after - If the - If NO - Failu Any I	ORTENED STATUTORY PERIOD MAILING DATE OF THIS COMMUN nsions of time may be available under the provisior SIX (6) MONTHS from the mailing date of this come period for reply specified above is less than thirty of period for reply is specified above, the maximum sure to reply within the set or extended period for repreply received by the Office later than three months ed patent term adjustment. See 37 CFR 1.704(b).	NICATION.  ns of 37 CFR 1.136(a). In no enterior in the standard in the standard will apply and will apply and will will, by statute, cause the aps after the mailing date of this control in the standard in	vent, however, may a reply be tim atutory minimum of thirty (30) days will expire SIX (6) MONTHS from plication to become ABANDONE	nely filed s will be considered timely. the mailing date of this comi D (35 U.S.C. § 133).	ımunication.				
Status									
1)	Responsive to communication(s) fi	led on							
2a)□		2b)⊠ This action is	non-final.		i				
3)□									
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Dispositi	ion of Claims								
4)🖂	Claim(s) 1-12 is/are pending in the	application.							
	4a) Of the above claim(s) is/	are withdrawn from c	onsideration.						
5)[	Claim(s) is/are allowed.								
6)	Claim(s) 1-12 is/are rejected.	·							
7)	Claim(s) is/are objected to.	•							
8)□	Claim(s) are subject to restr	iction and/or election	requirement.						
Applicati	ion Papers			•					
9)[	The specification is objected to by t	he Examiner.							
10)	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
	Applicant may not request that any obj	ection to the drawing(s)	be held in abeyance. See	e 37 CFR 1.85(a).					
	Replacement drawing sheet(s) including	ng the соптесtion is requi	ired if the drawing(s) is ob	jected to. See 37 CFR	R 1.121(d).				
11)	The oath or declaration is objected	to by the Examiner. N	lote the attached Office	Action or form PTC	)-152.				
Priority (	under 35 U.S.C. § 119			•					
a)l	Acknowledgment is made of a clain  All b) Some * c) None of:  1. Certified copies of the priorit  2. Certified copies of the priorit  3. Copies of the certified copies application from the Internations of the attached detailed Office activities.	y documents have be y documents have be s of the priority docum ional Bureau (PCT Ru	en received. en received in Applicati nents have been receive ule 17.2(a)).	ion No ed in this National Si	tage				
Attachmen	*(e)								
_	e of References Cited (PTO-892)		4) Interview Summary	(PTO-413)					
2) Notic	ce of Draftsperson's Patent Drawing Review		Paper No(s)/Mail Da	ate					
	mation Disclosure Statement(s) (PTO-1449 or er No(s)/Mail Date <u>5/17/04, 6/10/04, 5</u> [12] 05		5) Notice of Informal P 6) Other:	'atent Application (PTO-1	152)				
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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 2, and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colbert (US 2004/0154264) in view of Takahashi et al. (US 2003/0113520) or Sugimoto et al. (US 4,514,471). Colbert discloses a coated gypsum board product comprising a gypsum core and facing sheets (abstract). The board can be coated with paper on both sides thereof [0012]. In some applications, the facing sheet is a paper blended with mineral or synthetic fibers [0067]. The coating contains calcium carbonate, fillers, latex emulsions, and perlite filler [0015]. A silicone derivative is added as a hydrophobic agent [0035]. It should be noted that the Examiner is equating the calcium carbonate and perlite filler of Colbert to be the same as Applicant's fillers and the latex emulsion of Colbert to be the same as Applicant's binder. UV radiation resistance is obtained by exposing the overall surfaces to UV wavelengths [0039]. Colbert discloses the claimed invention except for the teaching that the coating is a radiation curable coating formulation.

Takahashi et al. (US 2003/0113520) disclose a decorative material comprising a substrate and a protective layer that comprises an ionizing radiation-cured resin (abstract). The substrate can be a gypsum board or a glass fiber nonwoven fabric or other various fabric substrates [0105]. Sugimoto et al. (US 4,514,471) disclose a process for the preparation of cured and coated gypsum

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panel (abstract). The coating comprises an ultraviolet radiation cured coating on a gypsum board (col 13, ln 8-23). It would have been obvious to have used the radiation cured coating of Takahashi et al. or Sugimoto et al. as the coating on the gypsum board product of Colbert, motivated by the desire to create a product having high surface hardness, excellent adhesive properties, and increased weathering properties.

3. Claims 3-8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colbert (US 2004/0154264), Takahashi et al. (US 2003/0113520), and Sugimoto et al. (US 4,514,471), as applied to claim 1 above, and further in view of Randall et al. (US 2003/0203191). Colbert, Takahashi et al., and Sugimoto et al. disclose the claimed invention except for the teaching that the facing material is a non-woven mat of glass fibers or synthetic fibers or a blend of synthetic and mineral fibers. Colbert, Takahashi et al., and Sugimoto et al. also fail to disclose that a water-resistant additive is added to the gypsum core.

Randall et al. (US 2003/0203191) discloses a mat-faced gypsum board comprising a set gypsum core sandwiched between and faced with mats of glass fibers (abstract). The fibrous mat comprises material that is capable of forming a strong bond with the set gypsum comprising the core of the gypsum board. Examples of such material include a mineral-type material such as glass fibers and synthetic resin fibers. The mat can be woven or nonwoven in form [0038]. The core of the gypsum board also preferably includes a water-resistant additive [0023], such as siliconates, wax emulsions, or organopolysiloxane [0033] and [0035]. It would have been obvious to have used the glass and synthetic facer material of Randall et al. as the facers in the product of Colbert, Takahashi et al., and Sugimoto et al., motivated by the desire to create a product having

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decreased delamination and increased strength. It also would have been obvious to have used the water resistant additive of Randall on the gypsum core of Colbert, Takahashi et al., and Sugimoto et al., motivated by the desire to create a gypsum product having increased water resistance.

## Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C. Ruddock whose telephone number is 571-272-1481. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**UCR** 

Ula Ruddock
Primary Examiner
Tech Center 1700